

ledones, for there are several fishes which have no vertebræ. The Insecta of Linnæus, or the articulated animals of authors, are distinguished by the absorption of the vitellus occurring by the back; and as all of them are not articulated, it would be better to name them the *Epivitelliens* or *Epicotyledones*. In the Worms (*Vermes*) of Linnæus, of which Cuvier has made his Mollusca and Radiata, the vitellus returns inwards neither by the back nor by the belly; and we may distinguish them by the names of *Allovitelliens* or *Allocotyledones*. The Mollusca certainly do not differ so much from the Radiata, as the Vertebrata do from the Articulata. Time, as the author says, must test this arrangement, which must be admitted to be very ingenious.

PROCEEDINGS OF LEARNED SOCIETIES.

BOTANICAL SOCIETY OF EDINBURGH.

Dec. 11, 1845.—Dr. A. Inglis in the Chair.

Mr. J. M'Nab read a continuation of his Journal of a Tour through part of the United States and the Canadas.

In the present portion, embracing the journey from Niagara to New London, Mr. M'Nab particularly alluded to the excellent state of the cultivated grounds through the Hamilton and Gore districts, and the suitableness of large tracts of the wooded country for emigrants. On some waste land round the head of Burlington Bay, many good specimens of herbaceous plants were observed in flower; of these the *Lespedeza hirta*, *Polygala verticillata*, *Gerardia tenuifolia*, and *G. pedicularia*, were abundant, with *Chrysopsis alba*; the latter plant being noticed for the first time as an inhabitant of Canada. Two grasses with strong herbage, *Andropogon furcatus* and *Limnetus cynosuroides*, abound in the neighbourhood of Hamilton, but neither seemed to be relished by cattle. The moorland ground in the vicinity of Brantford afforded many interesting botanical rarities, among which *Euphorbia corollata* was conspicuous. *Liatris stricta*, *Aletris farinosa*, *Lespedeza frutescens*, *Batschia Gmelini*, *Arenaria stricta*, *Viola palmata*, with many others, were plentiful in flower, and proved most attractive objects on the dry sandy plains; while the moister places yielded *Tofieldia glutinosa*, *Zigadinus chloranthus*, and *Glycine apios* in profusion. The forests of the inland districts were exceedingly rich and varied, many of them containing large and lofty trees of oak, elm, beech, hickory, ash, and white pine. Some of these districts, in process of clearing, presented a very remarkable appearance in consequence of large groups of stately trees standing dead, many with stems from 10 to 14 feet in circumference and varying from 80 to 100 feet in height. The mode resorted to by the settlers for killing the trees is by cutting, during the early part of winter, a notch five or six inches deep round the lower part of their stems. The white pines presented a very singular appearance, caused by a peculiar seeming twisting of the decayed trunks in

a uniform direction from left to right throughout their whole length. During the drying of the stems numerous fissures or rents are formed in a spiral manner from one-eighth to half an inch in width, about 4 inches deep, and generally from 4 to 10 inches distant at the bottom, presenting a ragged edge and narrowing upwards, causing the bark to fall off in large flakes. When dead, they are hewn down, piled in heaps, and set fire to. The quantity of splendid timber annually consumed in this way was described as being very great; but owing to the distance from water communication it is rendered comparatively worthless. Many of the road-sides, through the wooded districts for miles together, were richly adorned with *Lobelia cardinalis* and *siphilitica*, and *Monarda didyma*. *Sambucus canadensis* also presented a striking feature, being very abundant and densely covered with fruit. The only tree not previously seen was the Tamarack or black American larch (*Larix pendula*). In an extensive forest on the banks of the Thames river near New London this tree was generally of straggling growth, and never exceeded three feet in circumference.

Dr. Balfour read an account of a botanical trip to Ben Voirlich at the head of Loch Lomond, and Ben Nevis in August last. He gave description of the general features of the district, and noticed the occurrence of moraines and large angular boulders near the upper part of Loch Lomond, and smooth rounded rocks, with distinct groovings, near the waterfall of Glen Nevis; both being probably indicative of the former existence of glaciers. He also gave an account of the flora, and noticed the occurrence of *Carex irrigua* near Loch Sloy; of *Isoetes lacustris*, *Carex saxatilis*, and *Poa Balfourii*, in large quantities on Ben Voirlich; and of *Lysimachia vulgaris*, *Carex vesicaria*, *Rubus nitidus*, *suberectus*, *sylvaticus*, *Radula* δ . *foliosus*, and *humifusus*, near Inverarnan. After noticing the varieties of *Quercus pedunculata* and *sessiliflora* which occur in Glen Falloch, he proceeded to give a detailed account of the botany of Ben Nevis. Besides the usual alpine plants, he gathered *Saxifraga rivularis*, *Stellaria ceras-toides*, *Poa alpina vivipara*, *P. laxa*, and *montana*, *Cornus suecica*, *Cistopteris dentata*, *Carex saxatilis*, and various forms of *Hieracium*.

Specimens of the plants were exhibited to the meeting.

At this meeting the election of office-bearers for the ensuing year took place, when Professor Balfour was chosen President; and Drs. Greville, Seller, A. Inglis, and Douglas Maclagan, Vice-Presidents.

Jan. 8, 1846.—Professor Balfour, President, in the Chair.

The Treasurer read a letter from Mrs. Graham, presenting to the Society some valuable botanical manuscripts by the late Professor Graham.

The following communications were read:—

1. "Notice regarding some species of Plants recently observed as natives of Britain," by Mr. Evans. Among the species referred to in this notice were *Alsine stricta*, *Carduus arvensis*, β . *setosus*, *Glyceria plicata*, *Barkhausia setosa*, &c.; specimens of these, and of *Silene italica*, from two Scotch stations, were exhibited to the meeting.

2. Dr. R. C. Alexander on the Flora of Sicily. Dr. Alexander re-

gards the Sicilian flora as not an aboriginal one, but as derived from Africa on the one side, and from Greece and other Mediterranean countries on the other. The plants peculiar to the island are by no means numerous, and the flora is meagre when compared with that of Dalmatia and other countries on the shores of the Adriatic. In the course of two months' residence in the island, Dr. Alexander found only about 250 species which he had not seen in Dalmatia.

3. Dr. Alexander on the Plants found on the Apennines. He considers the flora of the Apennines from Piedmont downwards to be also a derived one; for excepting the genera which occupy fallow land and broken ground, such as *Medicago*, *Ononis*, *Convolvulus*, and sea-shore plants, he found no genus developed, but a species of one type and a species of another, without connecting links. On ascending the mountains, when he got to a region where a magnificent flora ought to be, he found at most a hardy hill plant that had crept up, but nothing whatever of an alpine nature.

On the Matese, about forty miles north from Naples, vegetation nearly ceased at about 6000 feet; and at the top, which is 7000 feet above the level of the sea, and where there is a snow-field that never entirely melts and therefore cold enough for alpine plants, he met with *Aubrietia Columnæ* (a mere variety of *A. deltoides*), *Ranunculus montanus*, a *Geranium* resembling a Carniolian species, *Arabis alpina*, an *Allium* not in flower, *Scrophularia glandulosa*, and three forms of *Saxifraga aizoon* which are reckoned by some as species. In nearly the same latitude, on the other side of the Adriatic, on the Biokovo, near Macarska in Dalmatia, there is, at the same height, a most interesting alpine flora, and in Ætolia, on Mt. Velugo, one equally so. Dr. Alexander found the Apennines by no means so productive as the Alps of Upper Styria and Upper Carinthia; and he looks upon the range as probably so recent in its formation, as to be only receiving its alpine flora gradually from other districts.

4. Dr. Balfour read a communication which he had received from Mr. Campbell of Islay, relative to Mummy Wheat, specimens of which were exhibited. The wheat sent by Mr. Campbell resembled what is called Bellevue Talavera. Other specimens of the so-called mummy wheat were shown, having all the characteristics of Egyptian wheat (*Triticum compositum*). There appeared to be great doubts as to the fact of the wheat found in mummy-cases having germinated. In all the instances mentioned, there are numerous sources of fallacy which have not been guarded against. The most authentic and best-corroborated instance of the germination of mummy-wheat seems to be that noticed by Mr. Tupper, who got from Mr. Pettigrew grains which had been taken by Sir Gardiner Wilkinson from some alabaster sepulchral vases. Even in this case, however, it is difficult to prove that the grains had not been recently inserted into the vases. The wheat which was then produced was the same variety as that now sent by Mr. Campbell.

5. A communication was read from Mr. Cruickshank, regarding the discovery of *Typha angustifolia* in Lochmaben Loch, and of *Centunculus minimus* near Dumfries.

Specimens were exhibited by Dr. Balfour of *Mentha rotundifolia*, var. *velutina*, in flower, and of *Pyrus pinnatifida* in fruit, from the island of Arran.

Mr. James M'Nab exhibited specimens of *Ardisia crenulata*, from the Horticultural Society's Garden, in which the seeds had germinated within the berries while hanging on the plant.

ZOOLOGICAL SOCIETY.

July 22, 1845.—Harpur Gamble, Esq., M.D., in the Chair.

Mr. Gould exhibited to the Meeting three new species of Birds from Australia:—

STRIX TENEBRICOSUS. *Str. disco faciali fuliginoso-griseo, circum oculos multo saturatiore; corpore superiore fusco-nigro purpureo splendente, singulis autem plumis maculâ albâ ad apicem ornatis; alis caudâque ejusdem coloris sed pallidioribus; corpore inferiore fusco-nigro, stramineo lavato.*

Facial disk sooty grey, becoming much deeper round the eyes; upper surface brownish black, with purplish reflections and with a spot of white near the tip of each feather; wings and tail of the same hue, but paler; the feathers of a uniform tint, without bars; tail-feathers faintly freckled with narrow bars of white; under surface brownish black, washed with buff, and with the white marks much less decided; legs mottled brown and white; irides dark brown; bill horn-colour; feet yellowish.

Total length, 16 inches; bill, $1\frac{3}{4}$; wing, 12; tail, $5\frac{1}{2}$; tarsi, 3.

Hab. The brushes of the river Clarence, in New South Wales.

COLLURICINCLA RUFOGASTER. *Col. omni corpore superiore, alis, caudâque olivaceo-brunneis; gulâ pallidè stramineo-albâ fusco-striatâ; corpore inferiore ferrugineo-rufa.*

All the upper surface, wings and tail olive-brown, with the exception of the inner webs of the primaries, which are dark brown; throat pale buffy white, streaked with brown; all the under surface rusty red; irides black; bill and feet fleshy-brown.

Total length, $7\frac{1}{2}$ inches; bill, $1\frac{1}{8}$; wing, $3\frac{3}{4}$; tail, $3\frac{1}{2}$; tarsi, $1\frac{1}{8}$.

Hab. The brushes of the Clarence River, in New South Wales.

DONACOLA FLAVIPRYMNA. *Don. capite cervino; dorso alisque castaneo-brunneis; corpore inferiore stramineo; tectricibus caudâ superioribus cerinis; tectricibus caudâ inferioribus nigris.*

Head pale fawn colour; back and wings light chestnut-brown; under surface buff; upper tail-coverts wax-yellow; under tail-coverts black; tail brown.

Total length, $4\frac{1}{2}$ inches; bill, $\frac{1}{2}$; wing, $2\frac{1}{4}$; tail, $1\frac{3}{4}$; tarsi, $\frac{3}{4}$.

Hab. The north coast of Australia.

Prof. Owen communicated his observations on the living *Echidna* exhibited at the Menagerie of the Society in May 1845. The animal when received at the Gardens was active and apparently in sound health. It was placed in a large but shallow box, with a deep layer